study was not designed to test mechanisms and, therefore, further studies are required to understand the mechanistic effects of the emotions elicited by film viewing.

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Authors' affiliations

M Miller, C Mangano, Y Park, R Goel, G D Plotnick, R A Vogel, University of Maryland, Baltimore, Maryland, USA

All authors participated in the conception and design of the study, and drafting and revision of the manuscript and provided administrative, technical, or material support.

Correspondence to: Dr Michael Miller, University of Maryland Medical Center, Center for Preventive Cardiology, Rm S3B06, 22 South Greene Street, Baltimore, MD 21201, USA; mmiller@medicine.umaryland.edu

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IMAGES IN CARDIOLOGY

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Intramyocardial bridging of the left anterior descending artery: appearance of arterial compression on ECG gated multidetector row CT

A 38 year old man presented with a history of multiple hospital admissions with recurrent exertional related chest pain. On each occasion there was no elevation in cardiac troponin. Exercise stress testing revealed myocardial ischaemic change but coronary angiography failed to demonstrate underlying coronary disease although myocardial bridging of the left anterior descending artery (LAD) was suspected.

ECG gated 16 detector row coronary computed tomography (CT) was performed. The Agatston calcium score was zero, making occlusive atherosclerotic coronary disease unlikely, and on initial review of images in the end diastolic phase (75–95% of R-R interval), the coronary anatomy was normal. Three dimensional volume rendered images clearly demonstrated intramyocardial bridging of the proximal LAD (panel A: 75% R-R interval; arrow), confirming this impression on the axial data; using ''cardiac transparency'' software (General Electric Medical Systems, Milwaukee, USA) removal of the myocardium revealed a normal calibre LAD (panel B). However, review of the images in the end systolic phase (35–45% of R-R interval) confirmed compression of the intramyocardial segment of the LAD (panel C: 35% R-R interval; arrow) and reduced calibre of the more distal aspect of this vessel; the myocardium and left ventricular cavity have been selectively removed.

An epicardial segment of coronary artery that ''tunnels'' through the myocardium is termed ''myocardial bridging''. This segment is compressed during systole, though its clinical relevance is debated. Generally considered a benign condition, it has been associated with angina, ischaemia, infarction, dysrhythmias, compromised left ventricular function, and sudden death. CT is a non-invasive alternative for diagnosis, where location, length, and depth of the tunnelled segment is readily assessed.

Although motion artefact is minimal in end diastole when reviewing CT coronary angiography, it is important to remain aware that symptomatic myocardial bridging can be demonstrated clearly on the systolic phases.

N E Manghat
C A Roobottom
A J Marshall
docnatman@msn.com